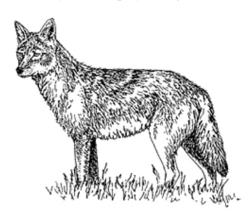
Service



# MANAGING URBAN/SUBURBAN COYOTE PROBLEMS

Coyotes (Canis latrans) are found throughout most of Nevada. The Nevada Department of Wildlife estimates a population range of 250,000 to 750,000 individuals. Coyotes are very adaptable and inhabit most areas of the state. They are medium sized animals belonging to the dog family. Most adults weigh between 22 to 25 pounds on the average, with males being the larger sex. With large erect ears, slender muzzle, and bushy tail they resemble a small collie dog. In the hotter drier regions of Nevada, coyotes are tan-brown in color with streaks of gray. In the more mountainous or humid areas the color is darker with less brown. In the winter the coats become quite dense, especially in the colder areas. The voice of the coyote is quite distinctive, consisting of various howls, high-pitched yaps, and occasional dog like barks. Coyotes are proficient predators, possessing the speed, strength, and endurance necessary to tackle prey as large as adult deer.



## **BIOLOGY**

In Nevada, coyotes breed mainly during January, February, and March. The gestation period is about 60-63 days. Young are born March through May, with litter sizes averaging 5-6 pups. Coyotes produce one litter per year. The young are weaned at 5 to 6 weeks and leave the parents at 6 to 9 months. Most adults breed first in their second year. Non-breeding, yearling, coyotes often stay with the adult parents and help care for the pups. Coyote dens are found in steep banks, rock crevices, sinkholes, and underbrush. Coyote dens are often holes that have been used by badger, skunks, foxes, or other animals with entrances enlarged to about one foot in diameter. Dens vary from 4 to 5 feet deep to 50 feet deep.

The diet of the coyote consists mainly of mice, rats, ground squirrels, gophers, rabbits, and carrion. They

also eat insects, reptiles, amphibians, fruits, birds and their eggs, and deer fawns. In some rural areas of Nevada they prey heavily on sheep, cattle, and poultry. In urban and suburban areas, garbage, domestic cats and dogs, other pets, hobby animals, and pet food can be important food items.

Coyotes are most active at night and during the early morning and late evening hours. In areas where they are not disturbed by human activities, and during the cooler times of the year, they may be active throughout the day. Urban coyotes are becoming very tolerant of human activities. Young coyotes tend to be more active during daylight hours than adults. Home range size varies depending on food availability.

### **DAMAGE**

Covotes can cause substantial damage. In rural areas they oftentimes kill sheep, calves, and poultry. In some parts of the state they cause damage to drip irrigation systems by biting holes in the pipe. In other areas they cause considerable damage to melons. Aircraft safety is often jeopardized when coyotes take up residence on or near runways. Coyotes have also been known to prev on various endangered/threatened/sensitive species including the desert tortoise, sage and sharp-tailed grouse. In urban and suburban areas, coyotes commonly take domestic house cats, small dogs, poultry, and other domestic animals. Coyotes have been known to attack humans and in 1999 several people were bitten by coyotes in Stateline, Nevada. In one case, a three-year-old girl was killed by a coyote in southern California.

# DISEASE

Distemper and canine hepatitis are among the most common diseases of coyotes. Rabies and tularemia also occur and may be transmitted to humans and other animals. Coyotes often carry parasites including mites, ticks, fleas, worms, and flukes. Mites which cause sarcoptic mange are an important ectoparasite of coyotes. Heartworm is one of the most important endoparasites in Nevada's coyote population. This parasite can be transmitted to domestic dogs by mosquitoes.

### PROBLEM PREVENTION

Coyotes are attracted to urban/suburban areas by the easy accessibility of food, water, and shelter. Reducing or eliminating the availability of these elements will often encourage covotes to leave. Garbage can lids should be secured at all times or garbage stored indoors. Pets should be fed during daylight hours and all pet food removed before darkness. Water bowls should be emptied and not left out after dark. Ripe fruits and vegetables should be covered at night or the garden/fruit trees enclosed by a coyote proof fence to prevent access by hungry coyotes. All windfall fruit/vegetables should be picked up daily. In areas where predation on pets has been documented, cats and small dogs should not be left out after dark unless enclosed in a covote proof enclosure. Food should never intentionally be left out for wild mammals. In suburban areas where livestock such as lambs, piglets, calves, or poultry are raised and coyote predation has been documented, precautions should be taken to prevent further losses. Animals can be brought into barns, sheds, or coyote proof enclosures at night, or in certain instances the confinement areas can be lit at night.

To exclude coyotes, fences should be constructed which are at least 5 1/2 feet tall. These can be made of solid wood, cement blocks, brick, or wire. If net wire fencing is used, the bottom portion should be at least 3 1/2 feet tall with squares smaller than 6 inches. If high tensile fence is used, it should be electrified with a fence charger to prevent coyotes from going through. All fences should have some sort of galvanized wire apron buried at least 4 to 6 inches in the ground which extends out from the fence at least 15 to 20 inches. The apron should be securely attached to the bottom of the fence. Coyotes are very adept diggers and prefer to dig under fences rather than jump them.

Brush and vegetation should be cleared from backyards and adjacent areas to eliminate habitat for prey which could attract coyotes. Landscaping should be pruned on a regular basis. These actions also remove hiding cover used by coyotes to stalk domestic pets. If cats cannot be contained indoors, and predation is viewed as a problem, posts can be installed in open space areas which provide an escape for the cats. These posts should be at least 7 feet tall, made of material that the cat can climb, and have enough space on top for the cat to sit.

During the time of the year when adult coyotes are caring for young (May-September), they can be very aggressive when their young are threatened. Domestic dogs are especially vulnerable to attack during this time. Even dogs on leases have been attacked when they got too close to a family of coyotes. In urban settings where a den site has been identified, caution should be taken to keep dogs out of the area. These areas should be posted with signs and people concerned about attacks on their dogs should avoid the area. Increased predation on

domestic pets can be expected around den sites, and extra precautions should be taken by residents to protect valued domestic cats or small dogs.

Whenever possible, coyotes should be harassed or scared to condition them to avoid humans. In some cases coyotes can be harassed enough to encourage them to move.

### DIRECT CONTROL

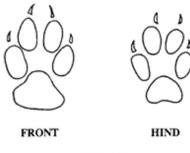
Where coyotes continue to be a problem after nonlethal methods have proven unsuccessful or when human health and safety is jeopardized, it is sometimes necessary to kill one or more animals. Coyotes can be shot where legal and appropriate or captured using a variety of restraining devices. Generally speaking, cage traps are not effective in capturing adult coyotes.

## LAWS AND REGULATIONS

Coyotes are not threatened or endangered in Nevada. They are classified as "unprotected" mammals by the Nevada Department of Wildlife (NDOW) and as such can be taken at any time using approved methods. NDOW regulations prohibit the relocation of coyotes without written permission from the Department. For further information on the legal status of coyotes and other wildlife contact your local NDOW Office.

For further information or assistance in solving coyote problems contact the USDA-APHIS-WS State Office (775-784-5081) or the USDA-APHIS-WS District Office for your area.

1/20/2005



TRACKS